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Proposal # 2001- Z 203 (Office Use Only)

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	P Cover Sheet (Attach to the front of each		
			Mucation
App	olicant Name: California Department of	<u>Fish</u> a	nd Game
Cor	ntact Name:Jeffrey Single.		
Ma	iling Address: 1234 E. Shaw, Fresno, Cal	<u>iforni</u>	a 93710
Tel	ephone: (559) 243–4017		
Fax	· ·		
Em	ail: isinq.le@dfg,.ca.gOV		
	300,000		
Ám			
Son	ne entities charge different costs dependent on t	he sour	ce of the funds. Kit is different for state or federal
	ds list below.		
Sta	te cost	Federa	al cost
Cos	st share partners?	Y	es <u>x</u> No
Ide	ntify partners and amount contributed by each	Potent	ial partners are DFG Grasslands Water
D	istrict and San Joaquin River Parkway	and (<i>les</i> <u>X</u> No ial partners <i>are</i> DFG <u>Grasslands Water</u> Conservation Trust. Firm Commitments to cost
sh	are have not yet been obtained	1.	_
Ind	icate the Topic for which you are applying (check o	nly one box).
	Natural Flow Regimes		Beyond the Riparian Corridor
	Nonnative Invasive Species		Local Watershed Stewardship
	Channel Dynamics/Sediment Transport	S	EnvironmentalEducation .
	Flood Management		Special Status Species Surveys and Studies
	Shallow Water Tidal/ Marsh Habitat		Fishery Monitoring, Assessment and Research
Π'	Contaminants		Fish Screens
Wh	at county or counties is the project located in?	Fre	sno, Madera, Merced, Stanislaus
	, i		
Wh	at CALFED ecozone is the project located in	n? See a	attachedlist and indicate number. Be as specific as
	sible 12.2, 12.3, 12.4, 13.2, 14		•
•			
Ind	icate the type of applicant (check only one box)):	
Œ	State agency		Federal agency
	Public/Non-profit joint venture		Non-profit
	Local government/district		Tribes
	University	0	Private party
	Other:		

Œ	TT 71		ninook salmon
	Winter-run chinook salmon	戉	Spring-run chinook salmon
Œ	Late-fall run chinook salmon	⊄	Fall-run chinook salmon
€4	Delta smelt	3	Longfin smelt
	Sp littail	煤	Steelhead trout
	Green sturgeon		Strip ed bass
ďΚ	White Sturgeon		All chinook species
ěř.	Waterfowl and Shorebirds	R	All anadromous salmonids
Œ	Migratory birds	M	American shad
CX.	Other listed T/E species: All in Region		
0	cate the type of project (check only one box Research/Monitoring Pilot/Demo Project Full-scale Implementation	□ €4	Watershed Planning Education
	s a next-phase of an ongoing project? eyou received funding from CALFED before?	Yes _ Yes _	TIVA:
lf y e	s, l ist project title and CALFED number <u>See</u>	ist	below.
Hav	e you received funding from CVPIA before?	Yes _	No_X_
If yes	s, list CVPIA program pmiding funding, project We ar	nd CVPI	A number (if applicable):

By signing below, the applicant declares the following:

- The truthfulness of all representations in their proposal;
- The individual signing the form is **entitled** to submit the application on behalf of the applicant (if **the** applicant is an **entity** or **organization**); and
- The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 24) and waives any and alrights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as pmided in the Section.

W.E. Loudermilk Printed m e of applicant

Signature of applicant

99-B153 Merced River Corridor Restoration Phase III
98-C1009 Merced River Salmon Habitat Enhancement Phase III
98-HI001 SJV Salmonids in the Classroom Program Enhancement
97-1121 Developing a Genetic Baseline for San Joaquin Salmon
97-H125 Gravel at Basso Bridge

EXECUTIVE SUMMARY:

PARTNERSHIPS FOR ENVIRONMENTAL EDUCATION WPER SAN JOAQUIN RIVER, GRASSLANDS WETLANDS, AND TUOLUMNE RIVER

By: California Department of Fish and Game, in collaboration with the San Joaquin River Parkway and Conservation Trust, and Grasslands Water District

Amount Requested: \$299,998 over 3 years.. Potential \$180,000 in-kind cost share

Type: Environmental Education

Principal Contact: Jeffrey **R.** Single, CDFG, 1234 E. Shaw Ave, Fresno CA 93710. (559) 243-4017 / 4020 fax. <u>isingle@dfg.ca.gov</u>

<u>Location</u>: Primarily Stanislaus, Merced, Fresno, and Madera counties, with foci near Fresno, LaGrange and Los Banos. CALFED Ecozones include the Delta, The East Side Delta Tributaries, the East and West San Joaquin Basin and adjoining watersheds.

<u>Objectives</u>: To help fill the gaps in the current environmental education resources available in the San Joaquin Valley; assist teachers in understanding and teaching watershed stewardship; and promote an awareness of ecological principles and environmental stewardship.

Approach To provide a regional curriculum, teacher workshops, and field trip opportunities that focus on local watershed ecology. The grant will provide materials, temporary help, docent training, and expanded curricula. The enhanced curriculum for Salmonids in the Classroom will be applicable statewide, and the materials can be used at ≥1 site. Existing programs will be augmented at two locations, and a pilot program will be promoted to implementation status in a third.

Expected Outcome: Increased numbers of students and teachers taking field trips and going through the educational programs at the three sites (currently ~25,000/yr); an increase in the number of teachers who use Salmonids in the Classroom or other another environmental education curriculum; increased exposure of parents, siblings, school administrators, and the general public to the content of the curriculum; enhanced understanding by the public of the ecological principles underlying CALFED goals of water quality, watershed management, and ecological functioning; enhanced curriculum for general use in grades K-12 that incorporates CALFED goals.

<u>Applicability</u> to CALFED Goals: The focus of the proposed grant is the education of students and the general public to the underlying concepts and goals of the ERP. The goal ideals are currently within the existing curricula, which are extremely successful.

PROJECT DESCRIPTION

STATEMENT OF THE PROBLEM

Problem: Furtherance of many Calfed goals and the conservation goals of other agencies and non-governmental organizations requires a public that is aware of and well-informed about ecology, natural resource management, and resource issues. Environmental education is becoming increasingly important **as** a tool to develop an aware and educated public. The use of environmental education curricula in schools, and the resultant exposure of students, teachers, and parents to this information generates a demand and opportunity for increased field trip experiences, teacher training, and curriculum development.

This grant would develop, expand and provide for continuation of environmental education in three important geographic areas that are strongly associated with the CALFED goals and program areas. The existing and planned environmental education curriculum is strongly oriented to the CALFED goals of water supply, water quality and ecological quality. <u>The partners have demonstrated ability to develop and implement successful environmental education programs.</u> Existing programs (Salmonids in the Classroom. DFG Interpretive programs, San Joaquin River Parkway Trust, and Grasslands Environmental Education Center) are in high demand, and cannot meet current requests for service

Currently in the region of the San Joaquin Valley addressed in this grant proposal, there are existing environmental education programs in three geographic areas: the San Joaquin River in the Fresno area (roughly Friant to Mendota Pool); the Grasslands Wetlands Complex near Los Banos; and the Tuolumne River near LaGrange. Currently these programs reach about 24,000 students, plus their teachers and parents, annually. This grant is expected to provide a long-term increase in that capacity. *As* a whole, these programs are limited in the amount of students they service, the breadth of topics covered, and range of grades covered in the curriculum. Individual needs differ among the programs, but there is substantial commonality among them that justifies considering them within one grant request.

The San Joaquin River in the Fresno region, is a regional focus for educational programs of the San Joaquin River Parkway and Conservation Trust, and the Department of Fish and Game. These two entities have developed separate but interrelated education programs that include a variety of activities: day-hikesfor students and the general public; guided canoe trips; volunteer experiences; conservation projects through local school groups and scouts; and teacher training workshops. Annually, about 11,000 students participate in Parkway Trust programs, and about 10–12,000 additional students participate in DFG educational activities, including the highly successful Salmonids in the Classroom Program. Funding is needed to continue and expand the current level of service by facilitating better access and utilization of existing use areas; buying educational materials and supplies; and providing more expansive workshops for teachers and decision-makers.

The Grasslands Wetland Complex of State, Federal, aid private wetlands constitutes the largest contiguous wetland in the State of California. The Grasslands Water District and Tri-Valley Growers, with other local support, have built and equipped the Grasslands Environmental

Education Center (GEECe). Unfortunately, the District has only been able to fund an educator for about 40% .time and the existing curriculum only covers grades **K-5**. There are no educator positions at DFGs adjacent Los Banos Wildlife *Area*. Annually, an estimated 3,000 students participate in programs at the Education Center and Los Banos Wildlife Area. This grant would fund a collaboration between the Grasslands Water District and DFG to provide staffing for the Environmental Education Center, expanded cumculum, and additional supplies for environmental education at the center and on adjacent DFG lands.

The LaGrange location along the Tuolumne River is the site of an existing DFG facility, where a permanent environmental education center is envisioned. The DFG has applied to other entities for funds to develop the concept plan for this educational facility. Meanwhile, there is the opportunity to develop local partnerships (local community partners, trained teachers, docents, etc.) and conduct educational programs at the site prior to building the educational center. This grant would fund materials and temporary help to implement **an** educational program that can operate prior to construction of the educational facility.

Conceptual Model: The essential concepts behind this proposal are: 1) **an** informed public will make sound choices and support responsible resource management; and 2) an environmental education program that is linked to the standard school curriculum, provides opportunities for convenient and meaningful field trips, and includes supporting teacher education, will be preferentially used by local teachers and school districts, This has generally proven the case in our experience with Salmonids in the Classroom. This proposal builds on standard pedagogical approaches and approved content based on guidance from the California Department of Education.

A related concept is that of building on established expertise (such as that of the Parkway Trust and DFG), existing facilities (*SJR* Parkway, DFG, Grasslands Environmental Education Center); and successful programs (Salmonids in the Classroom, Grasslands Environmental Education Center Curriculum; Parkway Trust education program).

Hypotheses Being Tested: No hypotheses are tested by this proposal, but the resultant framework of curriculum and implementation could allow hypothesis testing at later stages. Ongoing program evaluation will be performed.

Adaptive Management: This proposal falls somewhere between "Implement Pilot/Demonstration Projects" and "Implement Large-Scale Projects" (CALFED PSP Chpt. 3, Fig 2., Adaptive Management Process).

The proposal includes monitoring and evaluation of two key tasks: Field Trip Implementation, and Curriculum Development. Standard education evaluation techniques will be used for curriculum evaluation; field trip evaluation will also include evaluation of logistics, costs, and attendance rates. The results from these monitoring will be used to adjust curriculum content, scheduling, staffing, content location and other elements of field trip implementation, and provide information to quarterly and other reports to CALFED.

Educational Objectives: In order help fill the gaps in the current environmental education resources available in the San Joaquin Valley, we wish to provide a regional curriculum, teacher workshops, and field trip opportunities that focus on local watershed ecology. By creating a curriculum that supplements and expands on the curricula currently available from the DFG's Salmonids in the Classroom, Grasslands Environmental Education Center, and the San Joaquin River Parkway Trust, we can assist teachers in understanding and teaching about watershed stewardship.

Teacher workshops increase the number of skilled teachers that use the curriculum we provide, and may bring those concepts into their classroom in other contexts. Some of these 'workshops would be conducted at field sites for hands-on experiences that the teacher can take back to the classroom, and to promote this **sext** of activity as a fieldtrip for their students.

As a continuation or a culmination to the environmental curriculum, many classes go on field trips to their local rivers. In the case of the San Joaquin River Ecological Reserve, local river field trip sites are overscheduled by schools, because of the high demand for river experiences for students. This grant would expand on the opportunities for students to experience the river by making use of the sites easier, and providing more equipment and docents for these trips.

Program evaluations for these tasks are typical of many educational activities, and have been conducted for many of these activities already. Existing evaluation methods will be continued where appropriate; new methods will be applied when necessary.

Primary **Biological/Ecological** Objectives: The primary objectives for the environmental education is to nurture awareness, knowledge, and appreciation of aquatic and terrestrial natural resources and their impact on the region. This program would also encourage stewardship as well as active participation in restoration and conservation activities in the students' watersheds. These programs would complement the Salmonids in the Classroom program that the San Joaquin Valley, Southern Sierra Region of the DFG successfully began implementing eleven years ago, The Salmonids program continues to grow in demand within the school districts of this region.

PROPOSED SCOPE OF WORK

Location **and/or** Geographic Boundaries **of** the Project: **This** project would primarily involve the counties of Stanislaus, Merced, Fresno, and Madera. The ecological zones affected would include the Delta, The East Side Delta Tributaries, the East **San** Joaquin Basin and the West San Joaquin Basin, along with adjoining watersheds. Latitude / longitude are shown on the attached map.

Approach: The following tasks will be performed during the three-year duration of the project:

Task 1. Field Trip Supplies -

Provide materials to successfully conduct student field trips and teacher workshops in the designated three geographic areas. This includes acquisition **and** delivery of field trip support facilities including picnic tables, temporary shelters ("EZ-Up" or similar self-supported awning), and chemical toilets at San Joaquin River and LaGrange. It also includes assembling and refurbishing field study kits for student field trips; kits to be stored at the LaGrange site and at rented storage in Fresno near the San Joaquin River Ecological Reserve.

(Materials for Grasslands Environmental Education Center may be included in contract with Grasslands Water District to operate the center.)

Task 2. Curriculum Development and Distribution

Create a watershed ecology curriculum that would supplement and expand the current programs implemented by the DFGs Salmonids in the Classroom, the San Joaquin River Parkway and Conservancy Trust and the Grasslands Environmental Education Center. This curriculum will have a regional focus encompassing grades K-12. It will correspond with California Department of Education Subject Frameworks and be available to teachers statewide.

- Task 3. Field Trip Implementation. Conduct student field trips at the San Joaquin River Ecological Reserve and Tuolumne River in LaGrange, and at the Grasslands Envrionmental Education Center. **Tris** task will result in increased numbers of field trips and students served in the three geographic areas.
- (a) Recruit and train volunteers to act **as** docents. The San Joaquin River Parkway and Conservancy Trust can provide this service **on** a contract basis in the Fresno area. The Los Banos area will be served by the Grasslands Environmental Education Center staff, and LaGrange by DFG temporary employees or as DFG in-kind contribution.
- (b) Conduct field trips. The Department of Fish and Game will need additional temporary staff to assist with volunteer coordination, administering and conducting field trips and equipment maintenance.
- (c) Operate the Grasslands Environmental Education Center. This' centeris an educational

complex with an existing curriculum. The need for a full-time Grasslands educator is of the highest priority to implement the current curriculum. This subtask includes providing an educator to conduct programs at this facility, at the adjacent Los Banos Wildlife Area, and community outreach, teacher training, and related activities.

(d) Teacher training / decision-maker workshops. 3 – 6 workshops utilizing the new curriculum will be held at the San Joaquin River and LaGrange sites (as determined by teacher interest).

Task 4: Program Management:

This task will be accomplished by in-kind contribution **from** DFG.

Monitoring and Assessment Plans For the existing educational programs an annual report is. produced. This report shows the program's expansion geographically and with numbers of teachers and students participating. Questionnaires, surveys, and oral interviews of teachers and volunteers are currently used by the DFG staff to evaluate the program. These methods will continue and will incorporate these new proposed elements into the existing monitoring and evaluation practice.

Data Handling and Storage All records will be maintained by the Department of Fish and Game.

Expected Outcome:

The expected outcomes include:'

- Increased numbers of students and teachers taking field trips and going through the educational programs at the three sites;
- **An** increase in the number of teachers who use Salmonids in the Classroom or other another environmental education curriculum
- Increased exposure of parent, siblings, school administrators, and the general public to the content of the curriculum
- Enhanced understanding by the public of the ecological principles underlying Calfed goals of water quality, watershed management, and ecological functioning.
- Enhanced curriculum for general use in grades **K-12** that incorporates Calfed goals.

Work Schedule: The following table indicates the general plan of implementation of this grant. While completion of some task are essential to others (docent training is needed prior to conducting field trips; curriculum development prior to teacher training; field trip supplies prior to field trips...), many can proceed simultaneously, and there is considerable flexibility in scheduling.

Calendar	Ouarter 1	Quarter 2	Ouarter 3	Ouarter 4
<u>Year</u>				
2001	CALFED funds become available	DFG contracting process with CALFED	Year 1 of grant program Curriculum Development contract begins	Docent recruitment and training begins
			Grasslands Education Contract begins	Begin assembly of Field Trip Kits , acquisition of signs, tables, shelters,
				Curriculum Devel. Cant.
				Grasslands Ed. Cont.
2002	Field trips and evaluations	Field trips and evaluations	Year 2 of grant program	Field trips and evaluations
			Begin scheduling teacher	
	Storage and Toilet		training workshops and	Teacher training
	rental (continues)	Curriculum Devel.	evaluations	workshops and
		Cont.		evaluations
	Curriculum Devel,		Field trips and	
	Cont.	Curriculum Devel.	evaluations	Curriculum development
	Grasslands Ed.	Cont.	Curriculum Devel. Cont.	completed
	Cont	Grasslands Ed. Cont	Curriculum Devel. Com.	Curriculum Distribution Begins
		Grussianas La. Com	Grasslands Ed. Cont	Degms
				Grasslands Ed. Cont
2003	Field trips and	Field trips and	Year 3 of mant program	Field trips and
	evaluations	evaluations		evaluations
	Tacabartraining	Tanahantusinina	Field trips and	m 1 4 1 1
	Teacher training workshops and	Teacher training workshops and	evaluations	Teacher training
	evaluations	evaluations	Teacher training	workshops and evaluations
	Cvaraations	Cvariations	workshops and	evaluations
	Curriculum	Curriculum	evaluations	Curriculum Distribution
	Distribution	Distribution		Grasslands Ed. Cont
	Grasslands Ed.	Grasslands Ed. Cont	Curriculum Distribution	
-	Cont		Grasslands Ed. Cont	
2004	Field trips and	End of grant program		
	evaluations	Field tring and		
	Teacher training	Field trips and evaluations		
	workshops and	CvaruauOns		
	evaluations	Teacher training		
,		workshops and		
•	Curriculum Distribution	evaluations		
	ľ	Curriculum		
	Grasslands Ed. Cont	Distribution	,	
		Grasslands Ed. Cont		

Feasibility

This grant is highly feasible. The primary factors effecting feasibility are the demonstrated capabilities of the participants; and the existing success of the curricula.

APPLICABILITY TO CALFED ERP GOALS AND IMPLEMENTATION PLAN AND CVPIA PRIORITIES

The current work of the Salmonids in the Classroom falls directly in line with the goals of CALFED. The curriculum currently contains lessons and the importance of water quality, water supply and ecosystem quality, three of the four foci of the CALFED Bay-Delta Program. This grant would allow us to expand to other regions and expand on the current curriculum offered to the classrooms.

ERP Goals and CVPIA Priorities

The focus of the proposed program and the enhancement of the current Salmonid program is the education of students and the general public to the underlying concepts and goals of the ERP. The goal ideals are currently within the existing curriculum, which is extremely successful.

The program deals with the following Ecosystem Processes and Stressors:

Ecological Processes
Central Valley Streamflow, Target 1
Stream Meander, Target 1
Natural Floodplain and Flood Processes, Target 1
Central Valley Stream Temperatures, Target 1
Seasonal Wetlands, Target 1
Riparian and Riverine Aquatic Habitats, Target 1
Natural Sediment Supply, Target 1
Upper Watershed Processes, Target 1
Nontidal Perennial Aquatic Habitat, Target 1

stressors
Water Diversions, Target 1
Land Use, Target 1
Contaminants, Target 1
Dams, Reservoirs, Weirs, and Other Structures, Target 1
Predation and Competition, Target 1
Harvest of Fish and Wildlife, Target 1
Artificial Propagation of Fish, Target 1

Relationship to Other Ecosystem Restoration Projects

This proposal is not directly related to the ERP educational programs as described by CALFED. It is consistent with other educational programs, and it will provide a curriculum that can be used in other programs statewide.

Projects Previously Funded by CALFED or CVPIA

The San Joaquin Valley – Southern Sierra Region of the DFG has received funding for several other projects from CALFED. These are:

- 99-B153 Merced River Comdor Restoration Phase **III** recently constructed within budget; revegetation and monitoring underway
- 98-C1009 Merced River Salmon Habitat Enhancement Phase III (jointw/DWR) final design in preparation; a supplementary proposal to address anticipated funding shorfalls; environmental permitting initiated 2/15/01. (fun
- 98-HI001 SJV Salmonids in the Classroom Program Enhancement: *completed; translated materials in use*
- 97-1121 Developing a Genetic Baseline for San Joaquin Salmon contract with UC Davis inplace; year I of3 completed
- 97-HI22 Merced River Ranch Acquisition and Restoration (jointw/WCB) -acquisition phase moving close to escrow
- 97-H125 Gravel at Basso Bridge *completed; monitoring underway*
- 97-H123 Basso Bridge Land Acquisition (joint w/WCB) -acquisition proceeding on 1 of 2 parcels

System-Wide Ecosystem Benefits

The promulgation of widespread understanding of CALFED goals, and underlying ecological concepts will have both immediate and long-term benefits for all areas of the program that require the support of the public. Public support is manifested as voting records, comments to decision-makers, recruitment into relevant professions and trades, public opinion, local volunteerism, and actions of private landowners. The children who receive the benefits of this program will carry this information for years; their parents, friends, and siblings will also be affected. Each teacher who is trained, and can possible adopt even a part of the cumculum, can directly affect 20 – 30 students / year, plus other teachers, for the duration of their professional life. Potential benefits to the ecosystem **are** great – but difficult to measure directly.

QUALIFICATIONS

DEPARTMENT OF FISHAND GAME

Bill Loudemilk (Regional Manager, San Joaquin Valley - Southern Sierra Region)

Bill Loudermilk is currently serving as the Regional Manager of the San Joaquin Valley and Southern Sierra Region of the California Department of Fish and Game. Prior to his current position he was'the Supervisor of the Anadromous Fisheries Project in the same region. He received his Bachelor of Arts in Environmental Biology from California State University, Sacramento, and also participated in the Graduate Program at Humboldt State University. He actively promotes the DFG's leadership and partnership roles in Repional and Statewide environmental education programs.

Gail Hickman Davis (Fish & Wildlife Interpreter I, California Department of Fish and Game)

Gail.Hickman Davis has been employed with the DFG since 1992. Her current duties include coordinating the Salmonids in the Classroom Program for the San Joaquin Valley, Southern Sierra Region. Gail has a degree in Natural Resources Management from California Polytechnic State University, San Luis Obispo. She also holds teaching credentials in Life and Physical Sciences, Multiple Subject, and Cross-cultural Language and Academic Development (CLAD). She is an active member in the Central California Science Education Leadership Association and a board member for Region 7 of the California Regional Environmental Education Community (CREEC).

Gail has successfully administered the Salmonids in the Classroom project for several years, as well as conducted teacher workshops, directed DFG regional environmental education

GRASSLANDS WATER DISTRICT

Don Marciochi (General Manager, Grassland Water District)

Don Marciochi has been employed by the Grassland Water District since October 1973 and has served as the District's General Manager since 1983. He led the District's efforts to secure a firm water supply by active participation in the development of the refuge provisions of CVPIA and similarly was involved in bringing about the implementation of projects to remove selenium contaminated drain water from the District's water supply. Don has a degree in history from California State University in Fresno.

Dean Kwasny (Wetland Biologist, Grassland Water District)

Dean Kwasny graduated from Humboldt State University with a BS and MS in wildlife management. He worked for the California Department of Fish and Game for five years managing wetland habitats and for Ducks Unlimited as a waterfowl and wetlands biologist. **Now** with the Grassland Water District, he is working with private landowners to enhance wetlands for the benefit of wildlife. He also, assists wetland managers with water conservation practices,

habitat management and project development.

Mr. Marciochi and Mr. Kwasny established and administer the Grasslands Environmental Education Center, and are involved in the annual festival "wildAbout Wetlands" and similar public education activities in the Los Banos area.

SAN JOAQUIN RIVER PARKWAY AND CONSERVATION TRUST

Saundra Plett (San Joaquin River Parkway and Conservancy Trust)

Ms. Plett serves as the Education Director for the San-Joaquin River Parkway and Conservation Trust Her duties include the management and development of an outdoor and in-class environmental education program which serves 11,000 local school children annually. In addition she is responsible to recruit and train docents which lead these programs and works together with Fresno UnifiedSchool District to proved life science in-service training for K-12 teachers centering around the ecology of the river. Previous to this position Ms. Plett was for 15 years the owner and head teacher for Montessori pre-school/Kindergarten which featured an emphasis on natural sciences and environmental experiences for the students. Saundra has a B.A. from Fresno Pacific College and an M.A. in Early Childhood Education from California State University, Fresno where she serves as adjunct faculty in the school of Child and Family Sciences. She is an active member in the Central California Science Education Leadership Association and a board member for Region 7 of the California Regional Environmental Education Community (CREEC).

COSTS

Task 1. Field Trip Supplies - <u>S15,000</u>

Task 2. Curriculum Development and Distribution \$37,000

- **4.** Development \$35,000
- 5. Distribution \$7,000

Task 3. F	ield Trip Implementation	<u>S1</u>	92.328
4.	Docent recruitment and training	\$	9,600
5.	Field Trips	\$8	34,398
6.	GrasslandsEnv. Ed. Cntr	\$9	93,000
7.	Teacher workshops	\$	6,000

Overhead: \$50,000

(Overhead rates include processing and administration by Fiscal and Administrative Services of DFG. Overhead is estimated at 20%, based on current rates for Fiscal Year 1999-2000.)

Total Cost: \$299,998

Cost Sharing: \$180,000 (potential)

Cost sharing commitments have not yet been obtained from the partners in this grant. However, we expect them to be significant. A more precise definition of cost sharing and more definite commitments can be provided if needed when this grant is awarded.

DFG DFG will administer the grant, resulting is significant involvement not covered by the Department's overhead. Out initial estimate is approximately \$20 – 30,000 /year in staff time, materials, travel, and general support.

<u>Grasslands Water District</u>: In previous years, GWD has committed approximately \$15,000/year to the Environmental Education Center, as well as substantial staff time.

<u>San Joaquin River Parkway and Conservation Trust:</u> This non-governmental organization typically chares 10% overhead on contracts is administers, suggesting that another 5 – 10% overhead is donated. Their **staff** frequently works on assignments outside of their normal duties and hours. The Trust has amassed a large network of volunteers – if their potential contribution is included, we estimate another \$20 – 30,000 / year contributed.

Thus, the total estimated in-kind contribution for cost-share is avvroximately \$60.000/year for 3 years, or \$180,000 above the \$300.000 grant request

2001 PSP	Budget lable.	1			,-	<u> </u>				
Table 1 A	nnual and tot:	budget.	Partnershi	ns for Envi	ronment	al Education				
	Overhead rat					ar Eugodion.				
						ms Subject Ov	erhead			
_	,	Direct Labor	Sci. Aid Salary @	Benefits		Supplies /	Service	Equip	Overhead	
Year	Task	Hours	\$11/hr	@ 24%	Travel	Expendables	Contracts	ment	(20%)*	Total Cost
Year 1	Task 1					\$15,000			\$3,000	\$18,000
	Task 2									
	Subtask 2a						\$30,000		\$6,000	\$36,000
	Subtask 2b					\$2,000	\$2,000		\$800	\$4,800
	Task 3									
	Subtask 3a						\$3,200		\$640	\$3,840
	Subtask 3b	1000	\$11,000	\$2,640	\$500	\$800	\$6,600		\$4,268	\$25,608
	Subtask 3c						\$31,000		\$6,200	\$37,200
	Subtask 3d								\$0	\$0
Total Cos	st Year 1		\$11,000	\$2,640	\$500	\$17,600	\$72,800	\$0	\$20,908	\$125,448
Year 2	Task 1								\$0	\$0
	Task 2									
	Subtask 2a						\$5,000		\$1,000	\$6,000
	Subtask 2b					\$1,000	\$2,000		\$600	\$3,600
	Task 3								\$0	SC
	Subtask 3a						\$3,200		\$640	\$3,840
	Subtask 3b	1750	\$19,250	\$4,620	\$600	\$800	\$6,600		\$6,374	\$38,244
	Subtask 3c						\$31,000		\$6,200	\$37,200
	Subtask 3d					\$600	\$2,400		. \$600	. \$3,600
Total Cos	st Year 2		\$19,250	\$4,620	\$600	\$2,400	\$50,200	\$0	\$15,414	\$92,484
Year 3	Task 1								\$0	\$4
	Task 2								\$0	\$(
	Subtask 2a								\$0	\$0
	Subtask 2b								\$0	\$4
	Task 3								\$0	\$1
	Subtask 3a						\$3,200		\$640	\$3,84
	Subtask 3b	1700	\$18,700	\$4,488	\$600	\$800	\$6,600		\$6,238	\$37,42
	Subtask 3c						\$31,000		\$6,200	\$37,20
	Subtask 3d					\$600	\$2,400		\$600	\$3,60
Total Co	st Year 3		\$18,700	\$4,488	\$600	\$1,400	\$43,200	\$0	\$13,678	\$82,06
T-4-1 P	in at Court		640.050	644 740	84 700	604 400	****		\$50.000	# 000 00
Total Pro	ject Costs		\$48,950	\$11,748	\$1,700	\$21,400	\$166,200	\$0	\$50,000	\$299,99

LOCAL INVOLVEMENT

The following organizations and agencies are currently involved or support this program, and additional involvement of other local groups (individual schools, scout troops, etc.) is likely:

- 1. CREEC (California Regional Environmental Education Community Network)- a state-wide consortium representing school districts, offices of education, museums, land conservancies and other groups whose main focus is to ensure that California's youth are environmentally literate and responsible stewards of their community.
- 2. San Joaquin River Parkway and Conservancy Trust- a local.non-profit organization whose primary purpose is the acquisition and restoration of river comdor properties, and the education of students to carry on this practice.
- 3. GEECe (Grassland Environmental Education Center) a partnership of Grasslands Water District and Tri-Valley Growers, with extensive local support, set up'to increase public awareness and appreciation of wetlands, while recognizing the integral role played by agricultural interests, sportsmen, and others establishing and maintaining habitat for wildlife.
- **4.** Tri-Valley Growers The owners of the property on which the GEECe program takes place.
- 5. Turlock Impation District
- 6. Fresno County Office of Education
- 7. California Striped Bass Association Fresno & Modesto Chapters
- 8. Stanislaus County Fish & Wildlife Committee
- 9. Commercial Salmon Trollers Association
- 10. Merced Flyfishers
- 11. U.S. Forest Service
- 12. Stanislaus Flyfishers
- 13. LaGrange Improvement Association

There are no known third-party impacts.

COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

We intend to comply with the standard terms and conditions described in the PSP, and are not aware of any impediments to compliance.

LETTERS OF NOTIFICATION

STATE OF CALIFORNIA-THE RESOURCES AGENCY

DEPARTMENT OF FISH AND GAME

1234 E SHAW AVENUE FRESNO. CA 93710 (559) 243-4017



March 24,2000

County Board of Supervisors 2281 Tulare Street, Room 300 Fresno, California 93721

Dear County Board Supervisors:

Department of Fish and Game Application for Calfed Educational Grant

This letter is to inform you that the Department of Fish and Game, in collaboration with the Grasslands Resources Conservation. District and San Joaquin River Parkway and Conservation Trust, is submitting a grant request to Calfed for activities that could occur within your county. The purpose of the grant is to enhance environmental education opportunities for students in grades K-12 by providing curricula, materials, teacher training, and field trip opportunities. The primary geographic foci of these activities would be the San Joaquin River from Friant to Highway 99; the Los Banos area, and the LaGrange area, but other areas may also be served..

A copy of our grant application is attached. If awarded, the earliest that grant funds might be available is February 2001; our program is planned to commence July 1,2001. If we are successful, we will be in contact with the appropriate jurisdictions, both to keep you notified of our progress, and also to seek your collaboration. If you have questions at this time, please contact Ms. Gail Hickman-Davis, Regional Fish and Wildlife Interpreter (559-243-4005, ext 137), or **Dr.** Jeffrey Single, Conservation Planning Supervisor (559-243-4017).

Sincerely,

Regional Manager

Fresno = County Board of Supervisors

2281 Tulare Street, Room 300

Fresno, CA 93721

Planning Department

2220 Tulare Street, 6 Floor

Fresno, CA 93721

County Department of Education

1111 Van Ness Ave.

Fresno, CA

Madera = County Board of Supervisors

209 Yosemite Ave.

Madera, CA 93637

Planning Department

135 West Yosemite

Madera, CA 93637

County Department of Education

28123 Avenue 14 Madera, CA 93638

Madela, Cripsoso

Merced =

County Board of Supervisors 2222 "M" Street

Merced, CA 95340

Planning Department

2222 "M" Street

Merced, CA 95340

County Office Department of Education

632 West 13' Street

Merced, CA 95340

Stanislaus = County Board of Supervisors

1010 "10th Street Place

Modesto, CA 95354

Planning Department

1100"H" Street

Modesto, CA 95354

County Office of Education

1100"H" Street

Modesto, CA 95340

ENVIRONMENTAL COMPLIANCE CHECKLIST

Environmental Compliance Checklist

All applicants **must** fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for **functing** *Failure to answer these questions and* include them with the application will result in the application being considered nonresponsive and not considered for funding.

1.	Do any of the actions included in the proposal require compliance With either the California Environmental Quality Ac (CEQA), the National Environmental Policy Act (NEPA), or both?
	YES NO
2.	If you answered yes to #1, identify the lead governmental agency for CEQA/NEPA compliance.
	Lead Agency
3.	If you answered no to #1, explain why CEQA/NEPA compliance is not required for the actions in the proposal. Actions are categorically exempt.
4.	If CEQA/NEPA compliance is required, describe how the project will comply With either or both of there laws. Describe where the project is in the compliance process and the expected date of completion.
5.	Will the applicant require a cross public or private property that the applicant does not own to accomplish the activities in the proposal?
	YES NO
	If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide a coss

needs and permission for access with 30 days of notification of approval.

6. Please indicate what permits **or other** approvals may be required for the activities contained in your proposal. Cheek all boxes that apply.

Conditional use permit Variance Subdivision Map Act approval Grading permit General plan amendment Specific plan approval Rezone Williamson Act Contract cancellation Other (please specify) None required	
STATE CESA Compliance Streambed alteration permit CWA § 401 certification Coastal development permit Reclamation Board approval Notification Other (please specify) None required	(CDFG) (CDFG) (RWQ CB) (Coastal Commission/BCDC) (DPC, BCDC)
FEDERAL ESA Consultation Riven & Harbors Act permit CWA § 404 permit Other (please specify) None required	(USFWS)(ACOE)(ACOE)

DPC = Delta Protection Commission
CWA = Clean Water Act
CESA = California Endangered Species Act
USFWS = U.S. Fish and Wildliß Service
ACOE = US . Army Corps of Engineers

ESA = Endangered Species Att
CDFG = California Department of Fish and Game
RWQCB = Regional Water Quality Control Board
BCDC= Bay Conservation and Development Comm.

LAND USE CHECKLIST

Land Use Checklist

All applicants must fill out this Land Use Checklist for their proposal. Applications must contain answers to the following questions to be responsive and to be considered for funding. <u>Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.</u>

1.	or restrictions in land use (Le con		nand(i.e. grading, planting vegetation, or breed near of land in a wildlife refuge)?	ching levees
	YES		NO X	
2.	If NO to # 1, explain what type of Educational activiti		proposal (Le., research only, planning only).	
3.	If YES to # 1, what is the propose	d land use change or restric	ction under the proposal?	
4.	If YES to # 1, is the land currently	y under a Williamson Act o	contract?	
	YES		NO	
5.	If YES to # 1, answer the following	g:		
	Current land use Current zoning Current general plan designation			
6.	If YES to #1, is the land classified Department of Conservation Impo	d as Prime Farmland, Farml ortant Farmland Maps?	and of StatewideImportance or Unique Farm	land on the
	YES	NO	DON'T KNOW	
7.	If YES to # 1, how many acres of	laud will be subject to phys	sical change or laud use restrictions under the	e proposal?
8.	If YES to # 1, is the property curr	ently being commercially fa	rmed or graæd?	
	YES		NO	
9.	If YES to #8, what are		nployees/acre	

10.	Will the applicant acquire any interest in land under the propo	osal (fee title or a conservation easement)?
		X
	YES	NO
11.	What entity/organization will hold theint erest?	
12.	If YES to # 10, answer the following:	
	Total number of acres to be aquired under proposal Number of acres to be aquired in fee Number of acres to be subject to conservation easement	
13.	For all proposals involving physical changer to the land or restruction will:	riction in land use, describe what entity or organization
	manage the property	
	provide operations and maintenance services	
	conduct monitoring	
14.	For land acquisitions (fee title or easements), will existing water	rights also he aquired?
	YES	NO
15.	Does the applicant propose any modifications to the water right	or change in the delivery of the water?
	YES	NO X
16.	If YES to # 15, describe	

LETTERS OF SUPPORT



Grassland Resource Conservation District 22759 S. Mercey Springs Rd. Los Banos, CA 93635 Telephone (209) 826-5188 Fax (209) 826-4984

May 8,2000

Mr. Jeff Single California Dept. of Fish and Game San Joaquin Valley and Southern Sierra Region 1234 East Shaw Ave. Fresno, CA 93710

RE: CALFED Proposal - Partnerships for Environmental Education

The purpose of the Grassland Resource Conservation District (GRCD) is to protect, maintain, enhance, and restore the natural resources of Grassland wetlands for their environmental, recreational, educational, and economic value. As long standing supporters of the Grassland Environmental Education Center (GEECe), we emphatically endorse the California Department of Fish and Game's CALFED grant proposal entitled Partnerships for Environmental Education. GEECe has successfully promoted environmental education and public awareness of Grassland wetlands by offering programs to local elementary schools ranging from Stockton to Fresno. Although the program has been incredibly successful, there exists an unfulfilled need to expand the current curriculum to reach additional school children. The expertise and additional support created through the partnership with California Department of Fish and Game will be of significant benefit in expanding and strengthening environmental education in the San Joaquin Valley.

Sipperely,

Duane Cosart, President



Grassland Water District

22759 S. Mercey Springs Road Los Banos, CA 93635 Telephone (209)826-5188 Fax (209)826-4984

May 4,2000

Mr. Jeff Single California Dept. of Fish and Game San Joaquin Valley and Southern Sierra Region 1234 East Shaw Ave. Fresno, CA 93710

RE: **CALFED Proposal** – Partnerships for Environmental Education

The Grassland Water District fully supports the California Department of **Fish** and Game's CALFED grant proposal entitled *Parmershipsfor Environmental Education*. We believe the educational opportunity and partnerships created by this project will be of significant benefit in expanding and strengthening environmental education in the San Joaquin Valley. **As** lead agency in **the** establishment and ongoing operation of the Grassland Environmental Education Center (GEECe), we are committed to developing and integrating the goals of this proposal to expand and improve upon the existing **GEECe** curriculum. This project provides an excellent opportunity to extend GEECe's current K-5 curriculum by developing upper level coursework to reach a much larger audience, including students enrolled in middle and high schools.

Once again, we are in complete support of the project and strongly urge CALFED to fund the proposal. If we can be of any assistance in making this project a success, please notify us.

Sincerely,

Sincerery, Don Marciockie N. R Don Marciochi General Manager

CONTRACT FORMS

SF 242A

DWR 4187

OMB Approval No. 0348-0043 APPLICATION FOR 2. DATE SUBMITTED Applicant |dentifier **FEDERAL ASSISTANCE** State Application Identifier 1. TYPE OF SUBMISSION 3. DATE RECEIVED BY STATE Application Construction Prespolication 4. DATE RECEIVED BY FEDERAL AGENCY | Federal Identifier Construction Non-Construction X Non-Construction C. APPLICANT INFORMATION Organizational Unit: Legal Name: California Dept. of Fish and Game 11110 San Joaquin Valley -_ Address (give city, younly, Glate, and sip code): Name and telephone number of persons be contained in the involving this application (give area wde) 1234 E. Shaw Avenue Jeffrey Single (559) 243-4017 Fresno, California 93710 7. TYPE OF APPLICANT: (enter appropriate letter in box) 6. EMPLOYER IDENTIFICATION NUMBER (EIN): 9 4 1 6 9 7 5 6 7 H. IndependentSchool Dist. A State I. State Controlled Institution of Higher Learning 8. TYPE OF APPLICATION: B. County J. Private University C. Municipal Revision New Continuation D. Township K. IndianTribe If Revision. enter appropriate letter(s) in box(es) E. Interstate L. Individual F. Intermunicipal M Profit Organization G. Special District N. Other (Specify) A. Increase Award 8. Decrease Award C. Increase Duration D. Decrease Duration Othe (specify): 9. NAME OF FEDERALAGENCY CALFED 11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: 10. CATALOG OF FEDERAL DOMESTICASSISTANCE NUMBER: Partnerships in Environmental $x \times - x \times x$ Education: Uppper San Joaquin River, Grasslands Wetlands, and 12 AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Tuolumne River. Merced, Stanislaus Counties Fresno, Madera, 14. CONGRESSIONAL DISTRICTS OF: 13. PROPOSED PROJECT a. Applicant b. Project Start Date **Ending Date** 18th, 19th, and '20th 5-30-04 18th, 19th and 20th 6-1-01 16. IS APPUCATION SUBJECTTO REVIEW BY STATE EXECUTIVE 15. COMMATED FIRMING: ORDER 12372 PROCESS? a. Federal \$ a, YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 \$ b. Applicant PROCESS FOR REVIEW O N c. state \$ DATE __ d. Local \$ b. No. TO PROGRAM IS NOT COVERED BY E. 0.12372 OR PROGRAM HAS NOT BEEN SELECTED BY STATE e. Other \$ FOR REVIEW f. Program Income 17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? g, TOTAL Yes If "Yes," attach an explanation. 300:000 18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED. Type Name of Authorized Representative W. E. Loudermilk c. Telephone Number (559) 243-4005 v156Regional Manager e of Authorized Representation touderan Standard Form 424 (Rev. 7-97) Previous Edition Usable

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Prescribed by OMB Circular A-102.

BUDGET INFORMATION - Non-Construction Pro_rams SECTION A - BUDGET SUMMARYA / D Grant Program Catalog of Federal New or Revised Budget Estimated Unobligated Funds Function Domestic Assistance Non-Federal Total Non-Federal Federal Federal or Activity Number (g) (b) (d) (e) (a) (c) \$299,998 Totals SECTION B BUDGET CATEGORIES Total GRANT PROGRAM, FUNCTION OR ACTIVITY 6. Object Class Categories (5) (4)48,950 a. Personnel b. Fringe Benefits 11,748 c. Travel 1,700 d. Equipment e. Supplies 21,400 166,200 f. Contractual 0 g. Construction 0 h. Other i. Total Direct Charges (sum of 6a-6h) 249,998 50,000 j. Indirect Charges \$299,998 k. TOTALS (sum of 6i and 6j) Program Income 0

SECTION C: NON BEDEBAL DESCRIPORE	NO. NON FEDERAL DE	e de la companya de l	A PARTICIPATION OF THE PARTICI
(a) Grant Program	(b) Applicant	THE CONTRACTOR	(d) Other Sources (e) TOTALS
8,	6	69	
6)			
10.		-	
11. estimated in-kind contributions			
ines 8-11)		000,000	180,000
SECTION	ND FORECASTED CASHINEERS	0	180,000
Total for 1s	200	2nd Quarter	3rd Quarter
69 Control of the con	€9	69	5
14. Non-Federal			
15. TOTAL (sum of lines 13 and 14) \$125, 488	\$ 24.000	\$ 33 000	40
BUDGET ESTIMA	TES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT.	DED FOR BALANCE O	33,829
(a) Grant Program		FUTURE FUNDING PERIODS (Years	PERIODS (Years)
94	(b) First	(c) Second	(d) Third (e) Fourth
16,	€9	8	49
17.			
18.			-
19.			
(6	\$125,488	\$ 92,484	\$ \$2,066
SEC	TION F. OTHER BUDGET INFORMATION	RMATION	EUC 2003
23. Elect Cital ges. \$249,998	22. Indirect Charges:	harges: \$50,000	000
20. remains: 20% overhead basedon FY 1999/2000	00 rate.		
Author	Authorized for Local Depart	aller.	

Authorized for Local Reproduction

Standarc Standarc

State of California

DEPARTMENT OF WATER RESOURCES

The Resources Agency

Agreement No.:_	
_	
Exhibit:	•

STANDARD CLAUSES TINTERAGENCY AGREEMENTS

Audit Clause. For Agreements in excess of \$10,000, the parties shall be subject to ,.he examination and audit of the State Auditor for a period of three years after final payment under the Agreement (Government Code, Section 8546.7).

Availability **of Funds. Work** to be performed under this Agreement **is** subject to availability of funds through *the* State's normal budget process.

Interagency Payment Clause. For services provided under this Agreement, charges will be computed in accordance with State Administrative Manual Sections 8752 and 8752.1.

Termination Clause. Either **State** agency may terminate **this** Agreement updn thirty (30) days' advance written notice. **The** State agency providing the **services** shall **be** reimbursed for all reasonable expenses incurred up to the date of termination.

Severability. If any provision of this Agreement is held invalid or unenforceable by any court of final jurisdiction. It is the intent of the parties that all other provisions of this Agreement be construed to remain fully valid, enforceable, and binding an the parties.

Y2K Language. The Contractor warrants and represents that the goods or services sold, leased, or licensed to the State of California, its agencies, or its political subdivisions, pursuant to this Agreement are "Year 2000 compliant" For purposes of this Agreement, a good or service is Year 2000 compliant if it will continue to fully function before, at, and after the Year 2000 without interruption and, if applicable, with full ability to accurately and unambiguously process, display, compare, calculate, manipulate, and otherwise utilize date information. This warranty and representation supersedes all warranty disclaimers and limitations and all limitations on liability provided by or through the Contractor.

MAP